

Claims

1. An interface layer for a wireless server hosting server applications, the interface layer comprising a uniform interface (10) providing uniform interfacing to the server applications, and a bearer interface (11, 20) having a program associated with each of a plurality of bearer systems, characterised in that,  
  
each of said programs is a bearer module (20);  
  
the bearer interface comprises a bearer module interface (11) comprising means for binding said bearer modules (20); and  
  
the interface layer further comprises functions between the uniform interface (10) and the bearer module interface (11), said functions comprising means for allowing the server applications to make calls to connect to a bearer module and to determine status of accessible bearer systems.
2. An interface layer as claimed in claim 1, wherein the functions comprise a configuration manager comprising means for maintaining a configuration file of bearer modules and for responding to server application calls for a configuration list.
3. An interface layer as claimed in claim 2, wherein the configuration manager comprises means for returning information regarding network type, bearer system type, and address type to server applications.
4. An interface layer as claimed in claim 3, wherein the configuration manager comprises means for capturing bearer module information.

5. An interface layer as claimed in claim 2, wherein the configuration manager comprises means for maintaining a configuration file for every bound bearer module.
- 5 6. An interface layer as claimed in claim 1, wherein the functions include a bearer manager comprising means for registering bearer modules and for indicating bearer module status.
7. An interface layer as claimed in claim 6, wherein the bearer manager comprises  
10 means for responding to server application calls to register a bearer module.
8. An interface layer as claimed in claim 7, wherein the bearer manager comprises means for making a bind attempt to bind a bearer module to a transport mechanism.  
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9. An interface layer as claimed in claim 6, wherein the bearer manager comprises means for responding to application calls to disconnect from a bearer module.
10. An interface layer as claimed in claim 1, wherein the functions include a  
20 blacklist and whitelist manager comprising means for automatically testing all non-secure traffic.
11. An interface layer as claimed in claim 10, wherein the blacklist and whitelist manager comprises means for filtering traffic according to parameters set by a  
25 server application.
12. An interface layer as claimed in claim 1, wherein the functions include a  
30 callback handler comprising means for allowing a server application to call routines for pre-processing and post-processing of WDP packets.

13. An interface layer as claimed in claim 1, wherein the functions include a log function comprising means for logging test data from a bearer module under test, and for providing said data to a requesting server application.
- 5 14. An interface layer as claimed in claim 1, wherein the functions include a billing function comprising means for generating billing data on the basis of criteria supplied by a server application.
- 10 15. A wireless application server comprising a WSP and WTP layers over an interface layer as claimed in any preceding claim.
16. An interface layer for a wireless server hosting server applications, the interface layer comprising a uniform interface (10) providing uniform interfacing to the server applications, and a bearer interface having a program associated with  
15 each of a plurality of bearer systems, characterised in that,  
  
each of said programs is a bearer module (20);  
  
the bearer interface comprises a bearer module interface (11) comprising means  
20 for binding said bearer modules (20);  
  
the interface layer further comprises, between the uniform interface (10) and the bearer module interface (11):-  
  
25 a bearer manager (12) comprising means for registering bearer modules (20) in response to server application calls, and for indicating bearer module status;  
  
a configuration manager (13) comprising means for maintaining a  
30 configuration file of registered bearer modules (20), for responding to

server application calls for a configuration list and for returning information regarding network type, bearer system type, and address type to server applications.